

Remarks/Arguments

The Rejections of Claims 1-20 under 35 USC §102(b)

In the Office Action of April 4, 2006 the Examiner rejected Claims 1-20 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,668,434 ("Casebolt"). Applicants respectfully traverse this rejection and request reconsideration.

Anticipation requires that all of the elements of the claim be taught within the four corners of a single reference.

Claim 1

Casebolt does not teach a spring engaged with a cam and a knurl bar

Claim 1 recites: "a first spring engaged with said first cam and said knurl bar." Casebolt does not explicitly or implicitly teach a spring engaged with both a cam and a knurl bar. Instead, Casebolt teaches a spring engaging only a cam, as shown in Figure 1 of Casebolt. Specifically, spring 160 engages "cam" 158, but spring 160 does not engage knurl bar 140. An enlarged view of the most pertinent part of Figure 1 from Casebolt is shown below and illustrates this point. In particular, the region shown demonstrates that the spring does not engage the knurl bar. In fact, it is clear that the spring cannot engage the knurl bar.

The Examiner has stated that engage is a broad term that can encompass not only an interaction where the spring touches both the cam and knurl bar, but also instances where the spring forces the cam to touch the knurl bar, i.e., the spring touches cam + cam touches knurl bar = spring engages cam and knurl bar (albeit in a extended fashion). That argument is unconvincing in the current instance considering the ample evidence that the cam does not touch the knurl bar. The cam is not described in Casebolt as being able to touch the knurl bar, nor do the drawings from Casebolt show a cam that can touch the knurl bar, even in a fully rotated position. (See Figure 2 of Casebolt below). There is a very evident space between the lowest portion of the cam and the knurl bar. Any rotation of the knurl bar would not cause the cam to engage the knurl bar. Therefore, the spring does not engage the cam and knurl bar.

In an telephonic interview with Examiner Menezes this position was explained and the Examiner agreed that it appeared that the cam did not touch or engage the knurl bar. The Examiner also agreed that if the cam did not touch the knurl bar then the spring did not engage the cam and knurl bar, but only engaged the cam.

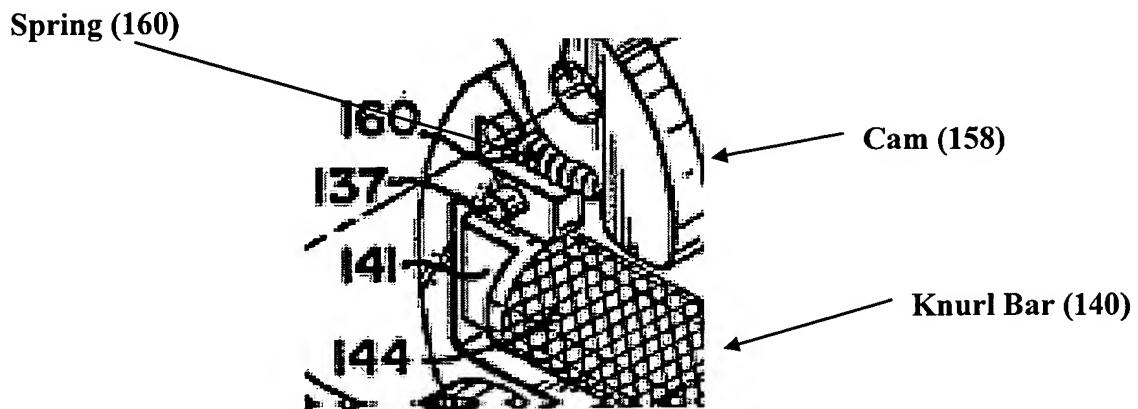


Figure 1

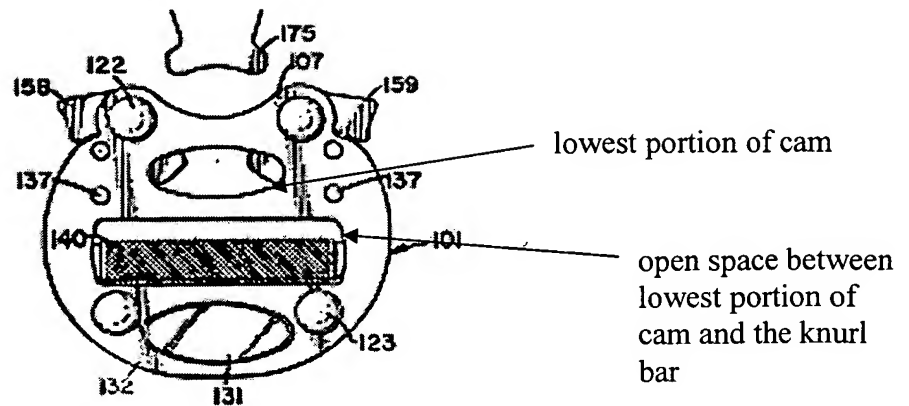


Figure 2



For all of the above reasons, Claim 1 is novel with respect to Casebolt. Claims 2-10, dependent from Claim 1, enjoy the same distinction with respect to Casebolt. Applicants courteously request that the rejection of Claims 1-10 be withdrawn.

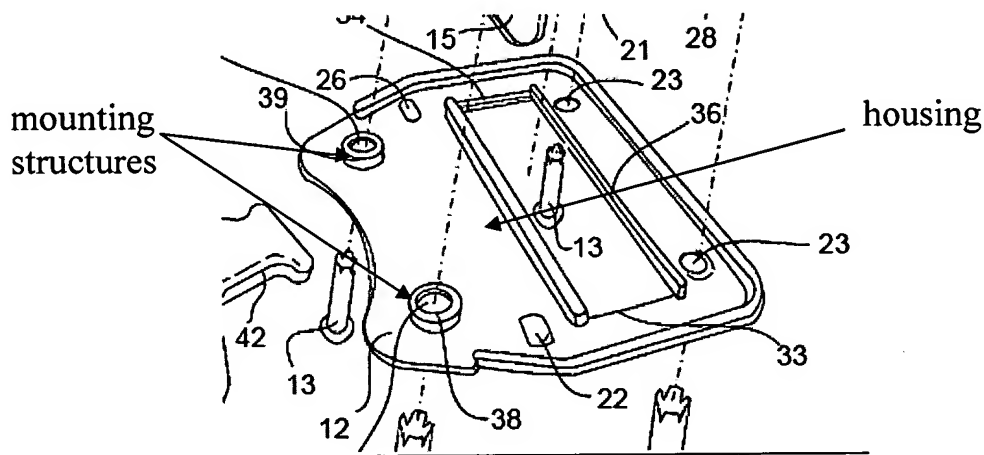
Claim 11

Casebolt does not teach a cam pivotably mounted on a mounting structure that is a protrusion fixedly attached to the housing

Claim 11 recites: "a housing with a first mounting structure, wherein said mounting structure is a *protrusion fixedly attached to said housing*; and, a *first cam pivotally mounted on said first mounting structure*,..." (emphasis added). Casebolt fails to teach the preceding elements of Claim 11. Namely, a first mounting structure that is a protrusion fixedly attached to the housing, or a cam that rotates about such a mounting structure. The mounting structure as defined by the Examiner is a plate, but according to the claims of the current application the mounting structure is a small protrusion on the housing. (See Figure 3 below). In Figure 1 of Casebolt, cams 158 and 159 are shown associated with intermediate plate 130 (called a mounting structure by the Examiner), but cams 158 and 159 are not mounted on plate 130. Also, Plate 130 can not be defined as a protrusion fixedly attached to the housing. Plate 130 is a separate piece of the buckle that has the cam floating next to it, but there is no element on plate 130 that the cams are actually pivotably mounted onto. Cams 158 and 159 float in between outer plates 111 (first structure) and 112 (second structure). The cams are not pivotally mounted on the mounting structure. Furthermore, the outer plates 111 and 112, and the intermediate plate 130 do not have a region that is a protrusion fixedly attached.

Rivets 122 extend through holes on cams 158 and 159, but rivets 122 are not fixedly attached to any of the structures of Casebolt. See Figure 1 and paragraph [0014]. Rather, rivets 122 sandwich plates 111, 112 and 113 together and hold them together. The protrusions recited in Claim 11 of the present application, which are fixedly attached to the housing, are distinguishable over a rivet since they do not need to be inserted through the cam in the manufacturing process. The cams are mounted onto the protrusion (mounting structures), which

creates a buckle with a mounting structure that is dedicated to supporting the cams, as opposed to the rivet from Casebolt that serves the function of supporting the cam and securing the three plates together. The protrusion also allows for the elimination of the intermediate plate, which is needed by the Casebolt buckle to support and position the cams. Manufacture of a buckle with protrusion on the housing (that is used to position and support the cams) is easier since the cams are held in place by the fixedly attached protrusions as the buckle is formed. The cams are not pivotally mounted on protrusions that fixedly attached to the housing.



Casebolt does not teach a cam rotating about a mounting structure that is a protrusion

Claim 11 recites: "said first cam pivotally mounted operatively arranged to *rotate about* said first mounting structure." (emphasis added). For a first object to rotate about a second point or object, the second object must form an axis for the first object. For example, in the present invention, mounting structure 38 is inserted into an opening in cam 15. Mounting structure 38 is the axis about which cam 15 rotates. In contrast, Casebolt teaches that cams 158 and 159 are mounted on rivets 122, which are not fixedly attached to the housing, nor are they protrusions fixedly attached to the housing, between outer plates 111 and 112. The cams move away from the plates and rotate about the rivets and do not rotate about intermediate plate 130 (dubbed the mounting structure by the Examiner). The cams can not be described as rotating about plate 130

since there is no axis formed by plate 130 about which the cams rotate.

For all the reasons above, Casebolt fails to teach all the elements of Claim 11. Therefore, Claim 11 is novel with respect to Casebolt. Claims 12-19, dependent from Claim 11, enjoy the same distinction with respect to Casebolt. Applicants courteously request that the rejection of Claims 12-19 be withdrawn.

Claim 20

Claim 20 recites that first and second cams are “pivotally mounted on protrusions on said bearing walls and operatively arranged to rotate about said first and second bearing walls.” As it has been pointed out above the cams from Casebolt are not pivotally mounted on protrusions on the housing, but are mounted on rivets inserted through the housing plates. Applicants respectfully submit that since Casebolt fails to teach the structural limitation of protrusions on bearing walls, and pivotally mounting cams on those protrusions, Claim 20 also is novel. Applicants courteously request that the rejection of Claim 20 be withdrawn.



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Conclusion

Applicant respectfully submits that the present application is now in condition for allowance, which action is courteously requested. The Examiner is invited and encouraged to contact the undersigned attorney of record if such contact will facilitate an efficient examination and allowance of the application.

Respectfully submitted,

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